

A NEW GENUS, NEW SPECIES OF DERMANYSSID  
MITE (ACARINA) FROM TEXAS<sup>1</sup>By G. F. AUGUSTSON<sup>2</sup>

A series of Mexican free-tailed bats (*Tadarida mexicana*) were recently received by the writer for examination. Among the ectoparasites recovered were a number of mites which an analysis proved new to science. It was found necessary to erect a new genus in the family Dermanyssidae to hold these interesting ectoparasites.

## FAMILY DERMANYSSIDAE

## CHIROPTONYSSUS, new genus

Both chelae present, shearlike. Dorsal plate of both sexes entire, covering whole of dorsum in male, anterior one-third only, tapering posteriorly in female. Sternal plate small, with two pairs of setae. Genito-ventral plate small, not reaching anal plate, with two pairs of setae. Peritreme situated laterally, extending backward along rim of fourth coxal pit. Anal plate eggshape in female. Legs moderate, second pair stouter than others in both sexes. Coxa of leg II with a single spine on upper anterior angle in both sexes. Femora of leg III in males with a large, prominent spine.

Genotype: CHIROPTONYSSUS TEXENSIS Augustson

CHIROPTONYSSUS TEXENSIS n. sp.

Holotype female

Chelae shearlike, the movable blade rather broad (fig. 4); epistome straight, longer than the outwardly curved hypostome; palpi, and rest of mouth parts as in other members of Dermanyssidae; first pair of legs long and thin, femora of second pair as broad as long, caruncles pulvilliform, claws present on all tarsi, coxa of second leg (fig. 3) with a spine above; sternal plate (fig. 2) small, arched, with two pairs of setae; genito-ventral plate (fig. 2) with two pairs of setae, genital aperture situated well forward between coxae III, extending slightly under sternal plate; anal plate (fig. 2) eggshape, longer than broad, with three setae, posterior margin with a weakly chitinized edge; venter with numerous, scattered, equal, thin setae; peritreme long and thin, extending from coxae I to, and nearly surrounding, coxae IV; dorsal plate (fig. 1) broad anteriorly, covering anterior third

<sup>1</sup>Contribution from the Eighth Service Command Laboratory, Fort Sam Houston, Texas.

<sup>2</sup>Captain, Sanitary Corps, AUS, Entomologist.

of dorsum, tapered posteriorly, not reaching posterior margin of dorsum, numerous thin, scattered setae.

Allotype male

Male essentially the same as female, with the usual modification of the chelae, and the fused ventral plates as in other members of Dermanyssidae; femora of leg III (fig. 5) with a prominent spine, acuminate, at an angle to the segment; dorsal plate entire, covering most of dorsum.

Holotype: a female, collected from *Tadarida mexicana*, Fort Sam Houston, Texas, 21 August 1944. Deposited in the U. S. National Museum.

Allotype: a male, collected and deposited as above.

Paratypes: nine females, one male, collected as above, retained in the Eighth Service Command Laboratory.

Type Host: *Tadarida mexicana*.

Type Locality: Fort Sam Houston, Bexar County, Texas.

Remarks: this new mite is located close to *Liponyssus* Kolenati and *Neoliponyssus* Ewing, from which it can be separated, among other things, by the presence of only two pairs of setae on the genito-ventral plate of the female, and the large dorsal plate in both sexes. The majority of the specimens collected in this series were obtained from the wing membranes of the host, along with ticks, identified by the writer as *Ornithodoros stageri* Cooley and Kohls. As the host roosted in close proximity to military personnel, it would be of interest to know if they attack humans. It is known that the tick found with them does.



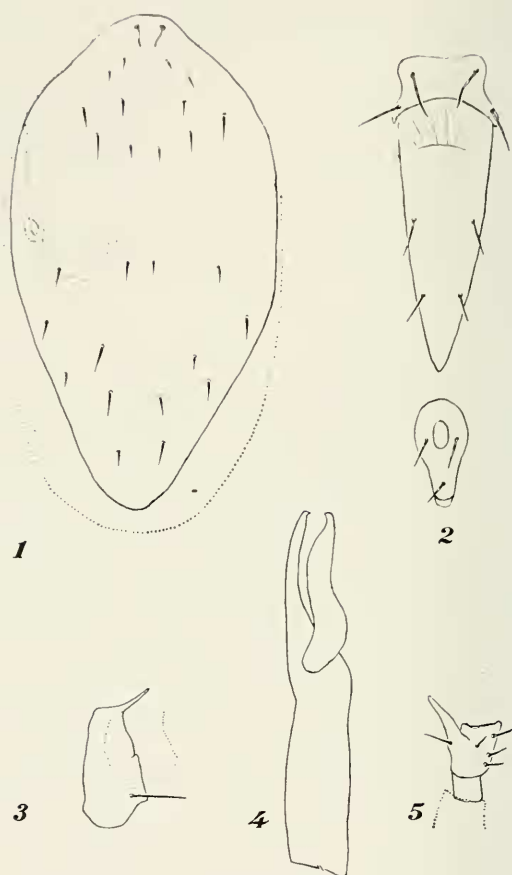


PLATE 17

- Figure 1. *Chiroptonyssus texensis* Aug., dorsal plate, holotype, female.
- Figure 2. *Chiroptonyssus texensis* Aug., ventral plates, holotype female.
- Figure 3. *Chiroptonyssus texensis* Aug., coxa II, holotype female.
- Figure 4. *Chiroptonyssus texensis* Aug., chela, a paratype female.
- Figure 5. *Chiroptonyssus texensis* Aug., femur III, allotype male.